



SDMS DocID

240691

SUPERFUND SITE PRELIMINARY CLOSE OUT REPORT

**Parker Landfill Superfund Site
Lyndonville, Vermont**

September 2005

DOCUMENT INDEX

SECTION

I. INTRODUCTION

II. SUMMARY OF SITE CONDITIONS

- A. Site Location and History
- B. Enforcement History
- C. Waste Characterization
- D. Record of Decision and Explanation of Significant Differences
- E. Remedial Construction Activities
- F. Redevelopment Potential

III. DEMONSTRATION OF QUALITY ASSURANCE AND QUALITY CONTROL

IV. ACTIVITIES AND SCHEDULE FOR SITE COMPLETION

V. SUMMARY OF REMEDIATION COSTS

VI. FIVE YEAR REVIEW

FIGURE 1:	SITE FIGURE
FIGURE 2:	FIGURE OF LANDFILL
FIGURE 3:	FIGURE OF PERMEABLE REACTIVE BARRIER
FIGURE 4:	FIGURE OF BIO-ENHANCED NATURAL ATTENUATION
FIGURE 5:	FIGURE OF WETLAND AREA
APPENDIX A:	FINAL INSPECTION REPORTS

I. INTRODUCTION

This Preliminary Close-Out Report documents that EPA has completed construction activities at the Parker Landfill Superfund Site in accordance with OSWER Directive 9320.2-09A-P, January 2000. EPA conducted a final inspection of the cap on June 20, 2001 and final inspection of the groundwater remedy on September 26, 2005 and has determined that the full remedy has been constructed in accordance with all Remedial Design and Remedial Action (RD/RA) plans and specifications. No additional construction activities are anticipated.

II. SUMMARY OF SITE CONDITIONS:

A. Site Location and history

The Parker Landfill Superfund Site (the Site), is located on Lily Pond Road in the southeast portion of the Town of Lyndon, Caledonia County, Vermont (Figure 1). The Landfill occupies approximately 25 acres of a 75 acre parcel on the southern side of Lily Pond Road, approximately 0.2 miles southeast of Lily Pond. The Landfill contains a Solid Waste Disposal Area (SWDA) and three smaller industrial waste areas (IWS) which have been consolidated and capped as a result of an April 1995 Record of Decision (ROD).

The surrounding area consists of mobile home communities and single family homes, as well as a combination of pasture land, agricultural land and woodlands. A private school and a nursing home are located .5 miles south of the Site. An unnamed stream traverses the Site and flows southwest to the Passumpsic River, which is located approximately 0.5 mile from the Site. The Passumpsic River has been classified as Class B which should be managed to maintain a level of quality compatible with good aesthetic value; high quality habitat for aquatic biota, fish, and wildlife; public water supply with filtration and disinfection; irrigation and other agricultural uses; swimming; and recreation.

The current Landfill was approved as a disposal facility for solid waste in 1971. Ray O. Parker & Sons, Inc. began operating the facility in 1972. Prior to 1972, the disposal area was used as a sand pit and a town disposal area.

The SWDA was used for the disposal of municipal solid waste and, at various times, industrial wastes. Operation of the SWDA continued until July 1992. The three industrial waste areas were used solely for the disposal of industrial wastes. These areas were used at various times between the years of 1972 and 1983.

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

Industrial wastes disposed at the Site included trichloroethene (TCE), sodium hydroxide, 1,1,1-trichloroethane (1,1,1-TCA), acetone, lacquer and stain sludge, paint sludge, tetrachloroethene (PCE), barium chloride, chromium and nickel plating rinse waters, polyester resin, mercury, electroplating sludge and water soluble coolants. Approximately 1,330,300 gallons of liquid industrial wastes and 688,900 kilograms of liquid, semi-solid, and solid industrial wastes were disposed of at the Site between 1972 and 1983.

In 1979, monitoring wells were installed by the Landfill operator. Routine monitoring of the Landfill by the Vermont Department of Environmental Conservation (VDEC) revealed the presence of chlorinated volatile organic compounds (VOCs) in the groundwater and in the unnamed stream adjacent to the Landfill. Follow-up sampling detected VOCs above Federal Maximum Contaminant Levels (MCLs) in five private wells south of the Landfill. VDEC subsequently installed additional monitoring wells and piezometers in 1984.

In 1985, VDEC informed four parties of their responsibility for performing investigative work and remedial actions at the Site. The parties initially declined and the Vermont Attorney General's office prepared to file a lawsuit against them. One of these parties (Vermont American Corporation) agreed to proceed with investigative and remedial actions and their contractor began a remedial investigation of one of the industrial waste areas in 1987. They installed wellhead treatment systems on five residential wells where contaminant levels exceeded MCLs, which operated until the residences were connected to the Lyndonville water supply.

VDEC completed a Preliminary Assessment/Site Evaluation in 1985, and EPA proposed the Site for listing on the National Priorities List on June 21, 1988; at which point investigative work ceased. On February 16, 1990, the Parker Landfill Site was added to the National Priorities List.

B. Enforcement History

EPA identified 14 Potentially Responsible Parties (PRPs) at the Site. In 1990 EPA entered into an Administrative Order by consent with a subset of the PRPs for the Remedial Investigation/Feasibility Study (RI/FS). The RI was released on May 2, 1994. The FS was released on June 1, 1994. EPA issued the ROD in April of 1995. The response action specified in the ROD included the following: a cap over the SWDA and three IWS areas, and a groundwater extraction and treatment system to contain contamination at the source and allow for the natural restoration of the downgradient aquifers.

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

In 1996, EPA and one party, Ethan Allen, Corp entered into an Administrative Order on Consent to perform the design for the landfill cap portion of the Remedial Action. In 1999, EPA, VDEC and Thirteen PRPs entered into a Consent Decree to construct and maintain the landfill cap portion of the Remedial Action. The remaining PRP, Vermont American Corporation (now owned by Robert Bosch Company), agreed to address the groundwater contamination through a Unilateral Administrative Order (UAO).

No activities were conducted using removal authority at the Site.

C. Waste Characterization

The following sections describe the nature and extent of contaminants that were detected in the areas investigated during the Remedial Investigation.

Soil

Elevated concentrations of VOCs, semi-VOCs and inorganic contaminants at the landfill were detected in surface and subsurface soils collected from the IWS areas. The highest contaminant concentrations were detected in IWS-2 area soils. Contaminants in IWS area soils included 1,2-dichloroethylene (1,2-DCE), TCE, and polycyclic aromatic hydrocarbons (PAHs). The SWDA was estimated to contain approximately 2 million cubic yards of waste and is approximately 55 feet deep, on average. The RI/FS assessment results indicated that the IWS areas, due to their history of accepting industrial wastes, were serving as additional, discrete source areas from which the VOCs were leaching into site soils and groundwater.

Groundwater and Residential Wells

Groundwater samples from overburden and bedrock monitoring wells at and around the landfill contained a variety of VOCs, SVOCs and inorganic contaminants. Monitoring wells beneath source areas contained some contaminants at concentrations exceeding Federal or State safe drinking water standards, including 1,1,1-TCA, 1,1-dichloroethylene (1,1-DCE), 1,2-DCE, benzene, methylene chloride, TCE, PCE, toluene, vinyl chloride, bis(2-ethylhexyl) phthalate, antimony, arsenic, beryllium, lead, cadmium, manganese, and nickel. Sampling detected VOCs above MCLs in five private wells south of the landfill, which have all been connected to town water. The RI/FS assessment indicated that the contaminants of concern were detected at the highest concentrations at the source area, and were decreasing in concentration with distance from the landfill as a result of diffusion and natural degradation processes.

Surface Water, Sediments, and air

Some metals and low levels of 1,2-DCE and TCE were detected in surface water samples from the unnamed stream that runs along the eastern side of the landfill. Sediment samples from the stream also contained metals. VOCs and SVOCs were detected infrequently and at low concentrations. The highest contaminant concentrations found in sediments were detected in the areas adjacent to the SWDA in the northeast portion of the Site. No VOCs or SVOCs were detected at elevated levels in sediment samples collected from the Passumpsic River. During two rounds of air quality monitoring conducted during the RI, only slightly elevated levels of VOCs were detected at the landfill.

Site Risks and Cleanup Objectives

A human health and environmental risk assessment for the Site was completed in May 1993. It was determined that there was an unacceptable risk to future residents who may consume contaminated groundwater. Adverse health effects would be due primarily to the presence of TCE, vinyl chloride and arsenic. Residents in these future new homes might also experience adverse health effects if they were exposed to contaminants in IWS area soils and the unnamed stream sediments immediately adjacent to the SWDA on a daily basis for several years. No adverse health effects were expected as a result of contact with the waters from the Passumpsic River or unnamed stream, or as a result of breathing air at the landfill.

The ecological risk assessment indicated the local habitat had been significantly affected due to soil erosion and silt deposit from the SWDA and the IWS areas. Additionally, animals could be affected by the metal contamination detected in surface soils in the IWS area through ingestion of plants and insects.

Based on the calculated risks, EPA identified the following objectives for the Site cleanup:

- * To prevent direct exposures to soil and solid waste in the SWDA and IWS areas;
- * To minimize the movement of contamination in the SWDA and IWS areas into groundwater, surface water and sediment;
- * To prevent ingestion of groundwater which may pose a risk to human health; and

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

- * To comply with Federal and State Applicable or Relevant and Appropriate Requirements (ARARs).

To address the potential risks, site-specific cleanup levels were established for groundwater at the Site. The point of compliance for attaining the cleanup goals is identified as the vertical surface located at the hydraulically downgradient limit of the landfill, that extends in the overburden groundwater to bedrock. A complete description and list of the cleanup goals can be found in Section X.A of the April 1995 ROD.

D. Record of Decision and Explanation of Significant Differences

The April 1995 ROD set forth the selected remedy for the entire Site which involved the construction of a low permeability cap over the consolidated wastes at the landfill, pump and treat of contaminated groundwater to reduce contaminant levels to safe drinking water levels at the landfill perimeter, long-term monitoring of river sediments and ground water, connection of all private residences within the plume buffer zone to the public water supply, and institutional controls to prevent any future ground water consumption and excavation of waste in the landfill area. The selected remedy is a comprehensive approach for this Site that addresses all current and potential future risks caused by Site wastes.

The major components of the remedy included:

- * Construction of multi-layer (RCRA subtitle C) caps over the SWDA and IWS areas;
- * Installation and operation of a gas collection system to reduce landfill gas accumulation and lateral migration below the solid waste landfill cap;
- * Installation of a source control groundwater treatment system to address overburden and bedrock contamination, the configuration of which was to be determined during pre-design studies of Site groundwater;
- * Conduct long-term sampling and analysis of groundwater and sediment to assess compliance with the groundwater cleanup goals through natural attenuation and to ensure sediments in nearby brooks/river have not been adversely impacted;
- * Institutional controls to protect the cap, and to restrict groundwater use, including the extension of municipal water service to all homes potentially affected by contamination; and
- * Review of the Site every five years to evaluate the effectiveness of the remedy

Construction of the landfill cap was initiated in April 1999 and was completed in 2001. One punch list item from the final inspection remains.

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

Landfill gas monitoring probes to determine the outer limit of landfill gas during low barometric events will be installed in 2005. The existing landfill gas monitoring probe distribution and monitoring has demonstrated, after five years of rigorous data collection, that the landfill gas does not threaten any of the residences adjacent to the landfill. Operation and Maintenance (O&M) is currently being performed by the PRPs. The landfill gas monitoring probes continue to be sampled through the long-term O&M program. In July 2003, an evaluation of the potential for groundwater impacts from the Site to adversely impact indoor air quality was completed, and it was determined that there would be no adverse impacts. This evaluation along with the long-term monitoring data indicates that there are no unacceptable human health risks resulting from landfill gas migration or groundwater vapor intrusion.

In 2004 EPA issued an Explanation of Significant Differences (ESD) for the groundwater component of the remedy. As further described in Section E below, additional hydrogeologic studies were performed at the Site to re-evaluate the selected remedy and consider innovative treatment methods to obtain groundwater cleanup goals. During pre-design sampling of the groundwater it was also determined that there was a significant spread of contamination into the downgradient area that needed to be addressed through engineered controls. In lieu of groundwater pump and treat using activated carbon, it was determined that a dual in-situ groundwater treatment alternative at the source and downgradient areas would more efficiently and cost effectively attain the target cleanup goals for the Site.

At the source area, adjacent to the landfill, pre-design studies indicated that a Permeable Reactive Barrier (PRB) of zero-valent iron would be the most effective method to intercept the highest concentrations of contaminants. It was also determined that a downgradient bio-enhanced natural attenuation system (BNA) consisting of sodium lactate injection and extraction wells would be the most effective treatment in this area of the plume. It was also determined that the combined PRB and BNA remedy would decrease further off-site migration of contaminants that are currently leaching to the ground water and migrating to downgradient areas.

The remedy at the Site currently protects human health and the environment because there is no current use of or exposure to Site media containing contaminant concentrations exceeding ARARs. However, in order for the remedy to be protective in the long-term, the following actions will be taken:

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

- * Finalize the institutional controls and update, as necessary, the zone of institutional controls to prevent human consumption of groundwater;
- * Continue operation and maintenance of the cap and groundwater remedies;
- * Over the next five-year review period, continue the sampling and analysis program as performed during the first five-year review period; and
- * Evaluate the need to update the cleanup goals and need for additional surface water and groundwater monitoring wells.

Construction of the landfill cap, leachate collection system and the groundwater treatment systems at the Site have addressed principal and low-level threat wastes. EPA has determined that human health and the environment are protected and that no further response measures are necessary. The remediation that has been completed as required by the ROD and the ESD has addressed the source of contamination found in the soil, the ground water and in river sediments at the Site. This action has eliminated the principal threat of direct contact to the waste and will reduce infiltration and precipitation of contamination to the ground water, as well as to significantly reduce contaminant levels in the groundwater.

E. Remedial Construction Activities

Landfill Cap Implementation

Construction of the cap began in April 1999 and was completed in December 2001. The design components of the cap were set forth in the Landfill Cap Remedial Design Statement of Work dated November 1996. Industrial wastes and contaminated soils were excavated from one of three separate IWS areas (#2) in June 1999 and placed into the SWDA area prior to capping; eliminating the need for a separate cap over this area. A continuous multi-layer cap was constructed over the SWDA and one of the other IWS areas (#1) between May 1999 and October 2000. A separate multi-layer cap was constructed over the last IWS area (#3). A landfill gas management system was constructed to control gas generated in the landfill. The active gas management system consists of 17 gas extraction wells, piping and blowers, and an enclosed flare to destroy VOCs and methane.

Institutional controls to restrict groundwater use at the Site and to restrict use of the cap and groundwater treatment areas have been defined and partially implemented; however, there are no current site uses that would violate the proposed institutional controls. A land use easement with the site owner has been drafted and will be finalized in 2006. The landfill has performed well since constructed. Details of the cap are presented in the

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

Remedial Action Report for the Landfill Cap Remedy dated July 2001 and the updated Remedial Action Report dated July 2002 (author, Ethan Allen, Inc.). All punch list items identified in the Final Site inspection for the cap have been completed with the exception of installation of the final 2-3 landfill gas monitoring probes.

The approximate extent of the in-place cap is shown in Figure 2.

Groundwater Remedy Implementation

PRB

The "Draft Source Area Pre-Design Technical Report" dated January 9, 2004, evaluated the feasibility of a zero-valent iron PRB wall to passively intercept the upgradient portion of the VOC-contaminated plume, and to effectively reduce concentrations of chlorinated VOCs in groundwater at the source area. This report concluded, based on column testing and bench-scale studies, that a zero-valent iron PRB would be effective in reducing concentrations of chlorinated VOCs to below the groundwater cleanup goals at the Site.

The PRB was installed using an open trench technique with excavation by an extended-arm backhoe, using a bio-polymer slurry for support (guar gum). The trench was backfilled with a granular iron/sand blend. The trench is approximately 2.5 feet in width and approximately 235 feet in length. The trench depth is approximately 62 feet below ground surface (bgs), decreasing linearly to approximately 30 feet bgs on the eastern end. The PRB is comprised of four different iron/sand blends. The iron percentage by weight is 34.5 percent, 61.2 percent, 100 percent and 51.3 percent in four different zones.

A total of eight monitoring wells, in three well clusters were installed within the trench during construction. Each cluster was bound together with nylon ties surrounding a section of reinforced steel bar and suspended in the excavation as the trench was backfilled with the iron/sand blend. These wells are 1-inch diameter and constructed using a 10-foot polyvinyl chloride (PVC) screen and riser. In addition, 21 monitoring wells in eight clusters were installed at strategic locations around the PRB perimeter. All wells were tested during construction to assess groundwater quality and geochemistry. The initial testing indicates that VOC concentrations have reduced and that there is an elevated concentration of ethene/ethane. As designed, a reactive zone has been established and dechlorination is occurring. O&M is currently being performed by the PRPs. The location of the constructed PRB is shown in Figure 3.

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

Following completion of the 2004 PRB Remedial Design Work Plan and during development of the 2004 Remedial Action Work Plan, a wetlands survey and delineation was completed to determine the potential impact of the PRB construction activities on Site wetlands and compliance with the ROD requirements (Executive Order 11990 and Vermont Wetlands Rules). The ROD specified that, depending upon the wetlands classification, either a 1 to 1.5 mitigation effort would be required or a 2 to 1 recreation would be required. During the 2004 investigation it was determined that the wetlands impacted by the PRB construction were in a Vermont Wetlands Class 2 location (isolated shrub Swamp/Emergent Marsh) that has a functional significance of providing surface and groundwater protection. The area of wetlands removed through the PRB construction effort included 0.26 acres (11,206 sq. ft.).

An area located adjacent to a current wetland at the Site (see Figure 5) was selected to create an additional 0.44 acres of Class 2 quality wetlands to meet the ROD requirements. In September 2005 the new wetland area was graded to lower its elevation, erosion control matting was placed, the area was seeded with a wetlands seed mix and was planted with native plant species. Due to recent beaver activity in the area, the final water inlet will be re-evaluated in the Spring of 2006 to ensure its effectiveness. Future O&M activities will ensure that the wetland has been established and continues to thrive.

BNA

The "Downgradient Pre-Design Technical Report" dated November 7, 2003, evaluated the feasibility of the use of in-situ bio-remediation technology (i.e., nutrient injection) to enhance natural attenuation/biodegradation of chlorinated aliphatic hydrocarbons in the groundwater downgradient of the landfill. Through field studies it was determined that geochemical conditions observed in this area are favorable for this technology. The primary nutrient determined for application at the Site, based on the pilot study is sodium lactate (source of organic carbon).

The BNA system constructed at the Site was designed to extract deep overburden groundwater, add nutrients to it and re-inject it. The contaminated groundwater will be extracted using two four-inch diameter extraction wells (with submersible pumps) screened within the top-of-rock zone of the overburden. These extraction wells are constructed of 20 foot long No. 10 continuous slot stainless steel, wire wrapped screens with Schedule 80 PVC risers. An engineered sand pack surrounds the screened interval to maximize yield from the surrounding formation. Each well is completed at the ground surface with a square pre-cast concrete enclosure that is backfilled with 1.5 inch stone. Extracted groundwater is

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

brought to the ground surface via the submersible pump and a section of 1.5 inch diameter reinforced PVC tubing. This tubing exits the riser and enters an above ground electrical distribution system.

There are fourteen injection wells which create two overlapping capture zones (comprised of well's 1-6 and 7-14 noted in Figure 4). These injection wells are constructed of a 20-foot, No. 10 continuous slot, stainless, wire-wrapped screens and a Schedule 80 PVC riser. As with the extraction wells an engineered sand pack surrounds each screened interval and completed at the ground surface with a precast concrete enclosure set on a pad of 1.5 inch stone.

The amended groundwater will be injected either under gravity or pressure. Injection wells 1 through 6 are configured for pressure injection and injection wells 7 through 14 are configured for gravity injection. The reagent injection frequency is approximately every six months to maximize the system efficiency and to reduce the potential for bio-fouling at the injection wells. The amendment materials include sodium lactate (60 percent), ammonium carbonate, ammonium phosphate and ammonium bromide. Approximately one month prior to an injection event the groundwater chemistry of the extraction well to be used will be evaluated to determine the appropriate amendment concentrations and delivery rates based on the calculated sulfate and carbon demand. Sampling will be completed based on the August 2005 draft Operation and Maintenance Plan (to be finalized in 2006).

There are both permanent and temporary BNA system components. The permanent components assembled during construction include the extraction well system, expansion tank and fittings, amendment addition board, pressure injection system and manifold system. System components that are disassembled generally consist of the tubing used to deliver the amended groundwater to the various injection wells. These sections of tubing can be disconnected from the permanent systems identified using quick-connect fittings.

The amendment delivery system is designed to operate continuously during the period of injection. Hours of operation will be recorded daily. The volume of amendment solution will be periodically assessed and additional amendment volume will be added as necessary. Flow rates into the injection well locations will not exceed 65 gallons per minute. All groundwater generated during system operation (i.e., flow rate monitoring) will be returned to the extraction wells. All post application monitoring procedures are included in the draft August 2005 O&M Plan.

The current estimate for meeting cleanup goals using this dual groundwater treatment system is within thirty years.

Institutional controls have been partially implemented. Institutional controls consist of easements and enforceable local or state regulations to restrict groundwater use. The area of restricted groundwater use was specified in the ROD to extend from the upgradient perimeter of the landfill to all downgradient boundaries of the contaminant plume (both in overburden and bedrock aquifers). The restricted groundwater use area includes a buffer zone around the contaminated area, to prevent potential spreading of the plume caused by drawdown in active private wells outside the area. In 2002, a municipal water line was constructed to service the residences within the proposed institutional control boundary. Groundwater at the Site was reclassified by the VDEC from a Class III (all groundwater) to Class IV (not potable; suitable for some industrial and agricultural use) in November 2003.

F. Redevelopment Potential

EPA reviewed the potential redevelopment options for the Site and has determined that given the current ownership of the property no Redevelopment Plan is necessary. The owner has current plans to subdivide the property for residential use, to connect all future structures to the public water supply system, and to abide by the institutional controls currently being implemented to protect the remedy and to restrict groundwater use.

III. DEMONSTRATION OF QUALITY ASSURANCE AND QUALITY CONTROL

All work performed at the Site was consistent with the ROD, ESD and the final design and RA Work Plans. The RA Work Plan Reports for the source control and management of migration portions of the remedy, including the Quality Assurance Project Plans (QAPP), incorporated all EPA quality assurance and quality control (QA/QC) procedures and protocol. EPA analytical methods were used for all validation and monitoring samples during RA activities. All procedures and protocol followed for soil, discharge water and air sample analysis during the RA will be consolidated and documented in two RA Work Plan Reports scheduled to be complete in 2006. EPA has found the construction quality assurance and performance data to be acceptable. Performance data was regularly reviewed during the construction program to confirm that the materials installed met the requirements of the plans and specifications.

All construction quality assurance material will be provided to EPA and located in the EPA Region I Records Center in Boston, MA. The QA/QC program utilized throughout the RA was sufficiently rigorous and was adequately complied with to enable EPA and VDEC to determine that the results reported are accurate to the degree needed to assure satisfactory execution of the RA, consistent with the ROD, the ESD and accepted Remedial Designs.

**Preliminary Close Out Report, Parker Landfill Superfund Site,
September 2005**

IV. ACTIVITIES AND SCHEDULE FOR SITE COMPLETION

All preliminary completion requirements for the Site have been met as specified in OSWER Directive 9320.2-09A-P (January 2000). Specifically, all construction activities that constitute substantial completion identified in the ROD and ESD have been successfully implemented. A final inspection by the EPA and the VDEC for the landfill was conducted on June 20, 2001. The final inspection for the PRB and the BNA systems by EPA and the VDEC was conducted on September 26, 2005 and September 22, respectively. Institutional controls to prevent the use of contaminated groundwater at the Site, and any disturbance of the constructed landfill are currently being pursued with the site owner and surrounding property owners. Operation and Maintenance activities will be permanently maintained by the PRPs. The approval date of the final Operation and Maintenance Plan is scheduled for June of 2006.

Schedule for Site Completion

TASK	Actual/Estimated Start/Completion	Responsible Organization
Operation/Functional period for remedy	September 2006 Completion	PRPs
Institutional Controls	September 2007 completion	PRPs/EPA/VT DEC
Landfill Gas Probes	December 2005	PRPs/EPA
Final Inspection	September 26, 2005 Completion	EPA/PRPs/VT DEC
Operation & Maintenance for the Site	Ongoing and in perpetuity	PRPs
O& M Plan	June 2006	PRPs
Remedial Action Report/ Approval	September 2006	PRPs
Final Close Out Report	September 2005	EPA
NPL Deletion	September 2006	EPA
Second Five-Year Review	September 2009	EPA with VT DEC

V. SUMMARY OF REMEDIATION COSTS

The ROD 30 year present worth cost for the total response action consisted of \$15,450,000 in Capital expenses and \$12,710,000 in O&M expenses, for a total of \$28,200,000. The estimated 30 year present worth costs associated with the landfill and institutional control component of the remedy was \$11,600,000 in capital expenses and \$2,010,000 in O&M expenses, for a total of \$13,300,000. The post construction estimated costs for these source control component (July 2001) are \$6,411,411 in capital costs and \$100,000 per year (present worth \$1,200,000) in O&M costs.

The revised ESD estimate to construct and operate the PRB and BNA groundwater treatment systems was approximately \$10,779,000, which included \$5,276,000 in capital costs and \$5,503,000 in O&M costs. The actual costs are not currently available.

VI. FIVE YEAR REVIEW

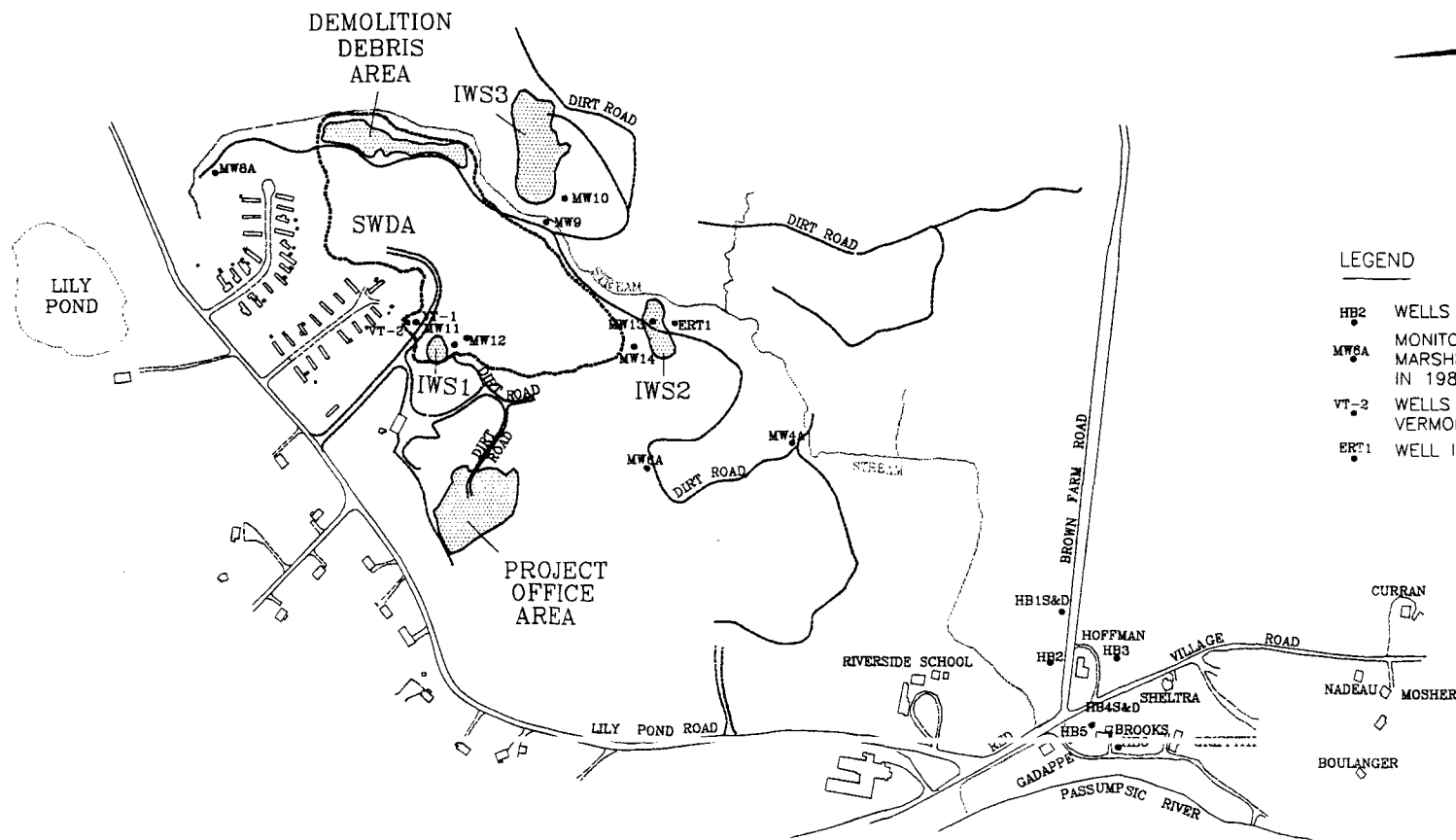
Hazardous substances will remain at the Site above levels that allow for unlimited use and unrestricted exposure after the completion of remedial action. Pursuant to CERCLA section 121(c) and as provided in OSWER Directive 9355.7-03B-P, "Structure and Components for Five-Year Reviews," dated June 2001, EPA must conduct statutory five-year reviews. The first five year review was completed in 2004 (five years after the initiation of cap construction activities in 1999). The second five year review is scheduled for September 2009. Subsequent five-year reviews will be conducted to ensure the remedy remains protective of public health and the environment. Finally, EPA will determine and document Site completion in accordance with OSWER Directive 9320.2-3A/3B "Procedures for Completion and Deletion of National Priorities List Sites" and OSWER Directive 9320.2-09 (August 1995).

Approved by:

Susan Studlien
Susan Studlien, Director
Office of Site Remediation and Restoration

09/30/05
Date

Figures

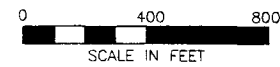


LEGEND

- HB2 WELLS INSTALLED BY VTAEC IN 1985.
- MW8A MONITORING WELLS INSTALLED BY MARSHFIELD ENGINEERING FOR VTAEC IN 1984.
- VT-2 WELLS INSTALLED BY THE STATE OF VERMONT, DATE UNKNOWN.
- ERT1 WELL INSTALLED BY ERT IN 1986.

NOTES:

1. BASE MAP FROM "TOPOGRAPHIC WORKSHEET OF THE PARKER LANDFILL", DATED SEPTEMBER 5, 1987, PROVIDED BY EASTERN TOPOGRAPHICS, WOLFBOURNE, NEW HAMPSHIRE, TO A SCALE OF ONE INCH EQUALS 100 FEET.
2. SURVEY DATUM IS 1929 USGS MEAN SEA LEVEL.
3. EXTENT OF IWS AND SWDA AREAS IS APPROXIMATE.



ESE Environmental Science & Engineering, Inc.	
PARKER LANDFILL PROJECT LYNDONVILLE, VERMONT REMEDIAL INVESTIGATION REPORT	
LOCATIONS OF PREVIOUSLY INSTALLED WELLS AND PIEZOMETERS FIGURE 1	
DRAWING NAME: PREWELLS	FILE NUMBER: 4905024
SCALE: 1"=500'	REVISION: 0 DRAWN BY: PLW DATE: 11/12/92

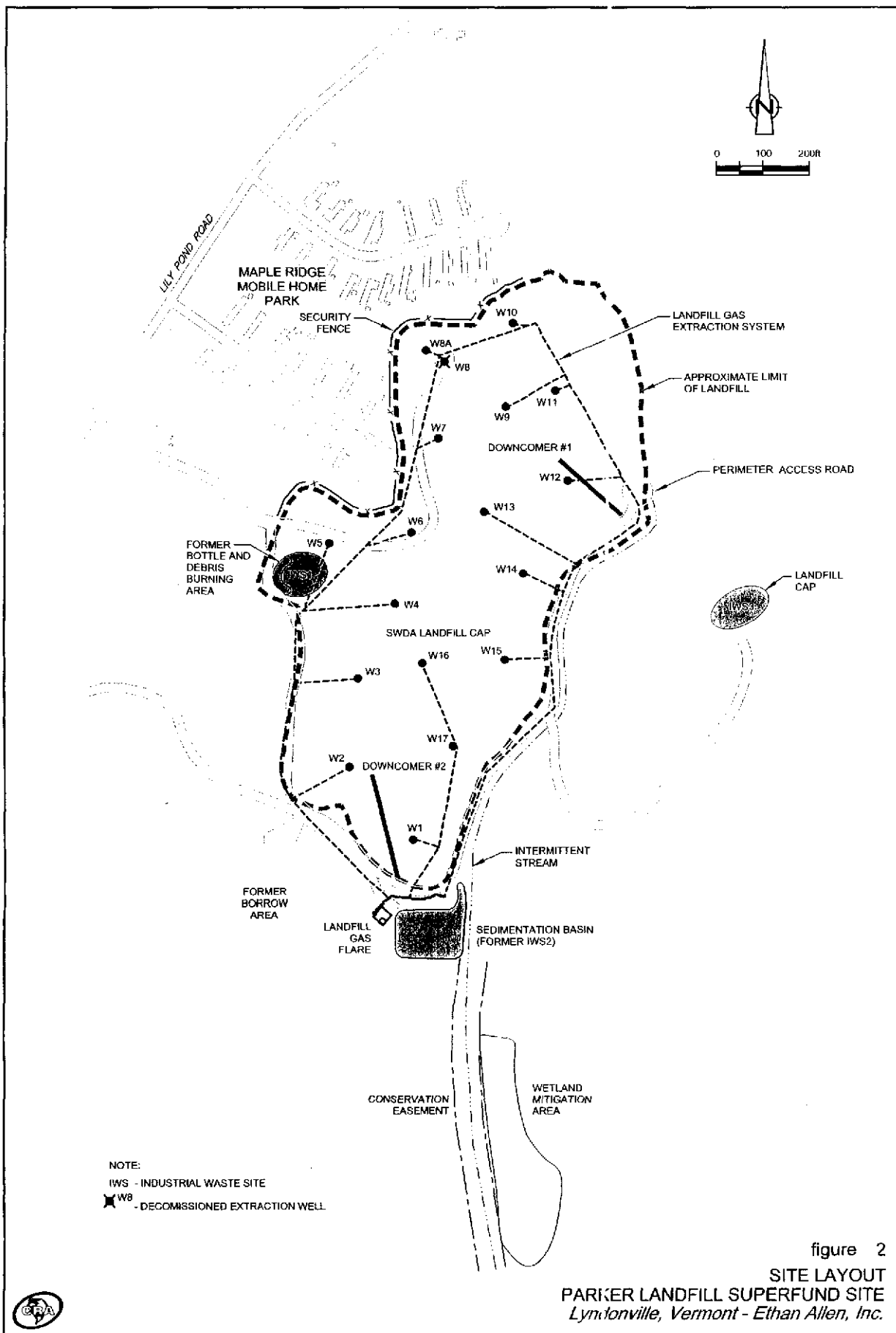
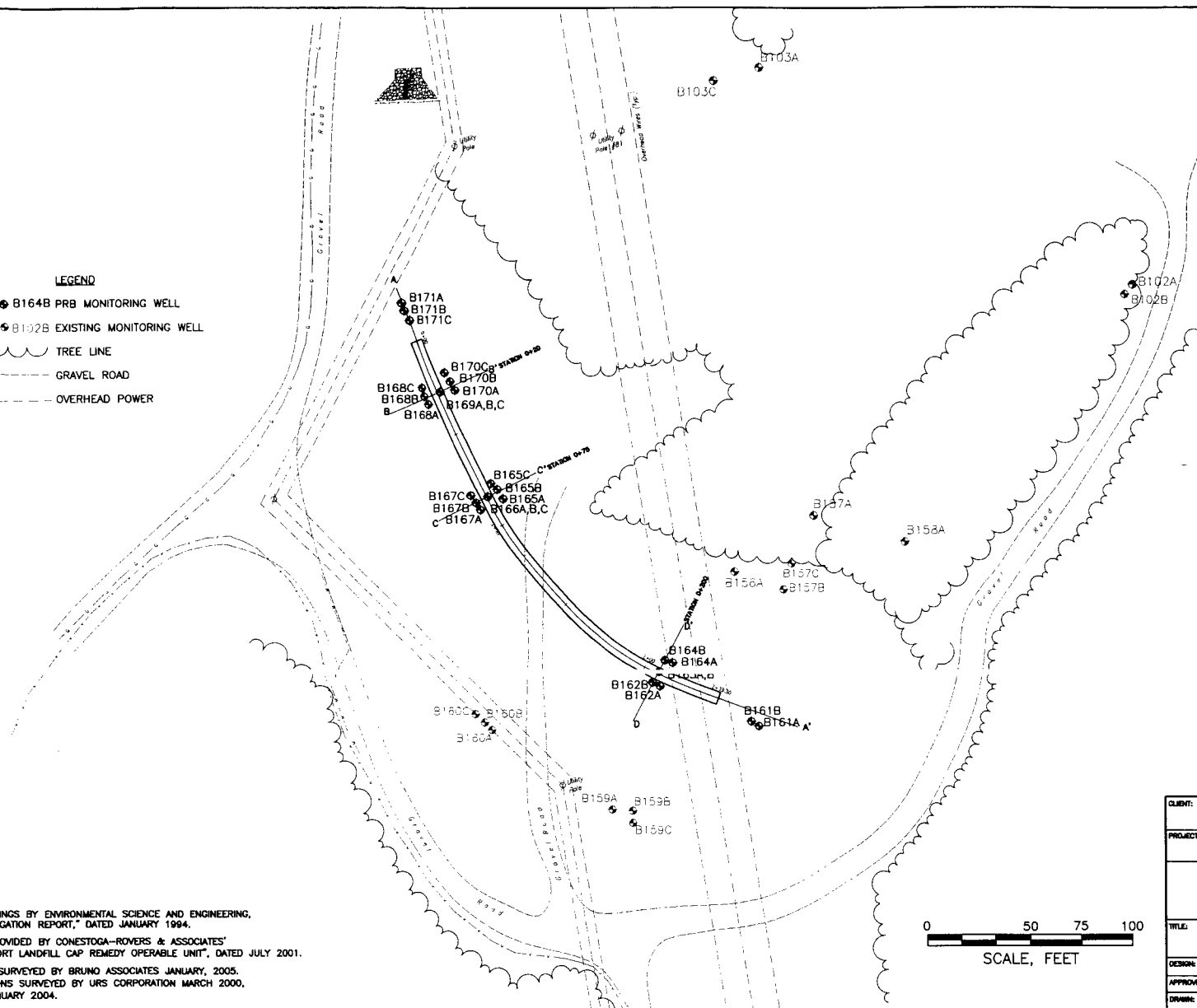


figure 2
SITE LAYOUT
PARKER LANDFILL SUPERFUND SITE
Lyndonville, Vermont - Ethan Allen, Inc.

- LEGEND**
- B164B PRB MONITORING WELL
 - B102B EXISTING MONITORING WELL
 - TREE LINE
 - - - GRAVEL ROAD
 - - - OVERHEAD POWER



SOURCES:

BASE MAP FROM DRAWINGS BY ENVIRONMENTAL SCIENCE AND ENGINEERING, INC. "REMEDIAL INVESTIGATION REPORT," DATED JANUARY 1994.

LANDFILL FEATURES PROVIDED BY CONESTOGA-ROVERS & ASSOCIATES' REMEDIAL ACTION REPORT LANDFILL CAP REMEDY OPERABLE UNIT, DATED JULY 2001.

PRB WELL LOCATIONS SURVEYED BY BRUNO ASSOCIATES JANUARY, 2005.
EXISTING WELL LOCATIONS SURVEYED BY URS CORPORATION MARCH 2000,
AUGUST 2003 AND JANUARY 2004.

0 50 75 100
SCALE, FEET


DRAFT

CLIENT: VERMONT AMERICAN CORPORATION	
PROJECT: PARKER LANDFILL	
URS Corporation	
TITLE: PERMEABLE REACTIVE BARRIER LOCATION PLAN	
DESIGN: JSIH	SCALE: AS SHOWN
APPROVED: JCC	DATE: 05/06/05
DRAWN: LRH	FILE NO: siteview
PROJECT NO: 39459654	FIGURE NO: 3

LEGEND


(EW-5)WELL A  EXTRACTION WELL
(FORMER IDENTIFICATION NUMBER IN PARENTHESES)

(IW-5)WELL 9  INJECTION LOCATION
(FORMER IDENTIFICATION NUMBER IN PARENTHESES)

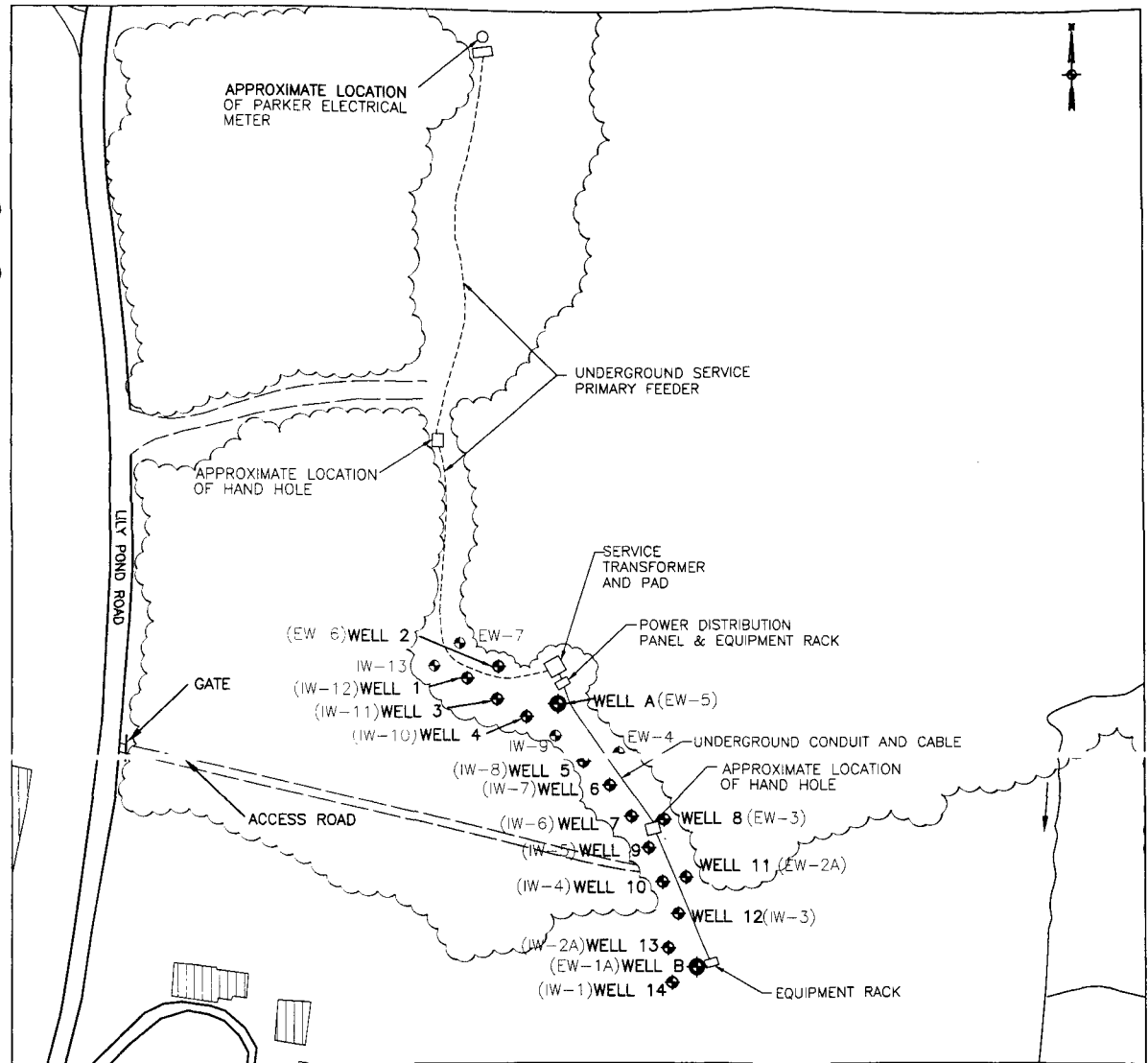
IW-9  NON-INJECTION LOCATION

 UNIMPROVED ROAD

 ROAD

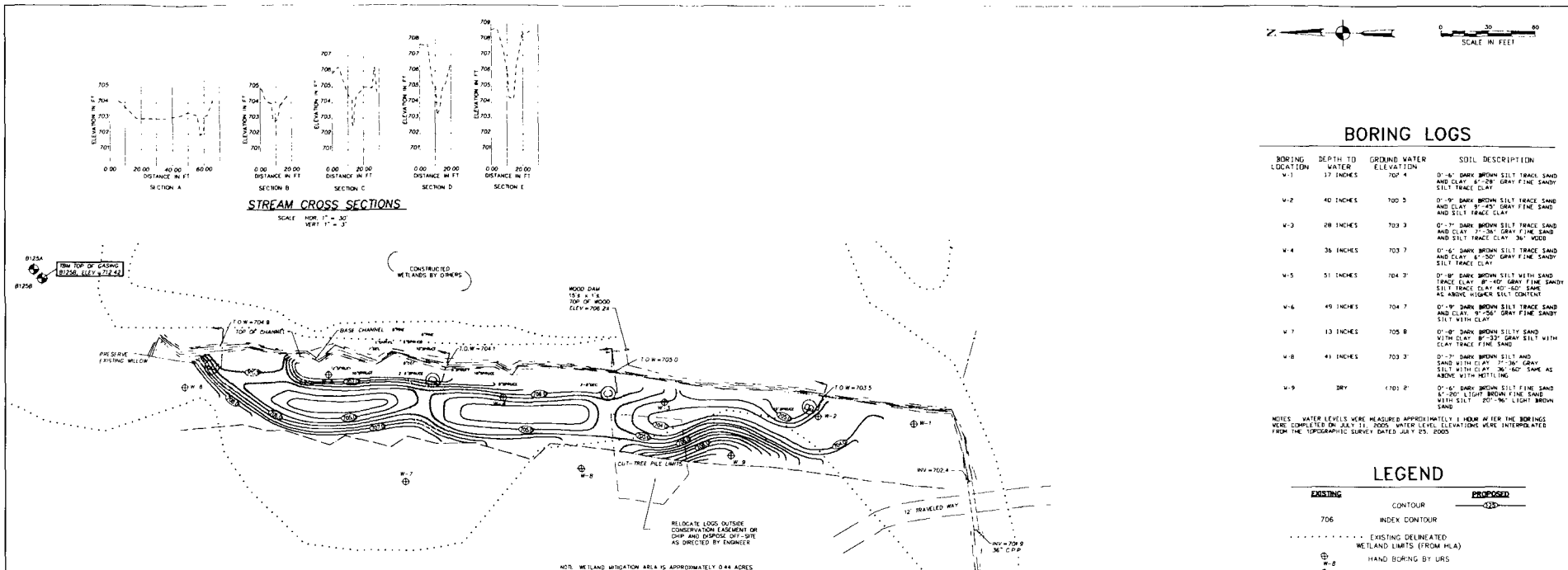
 BUILDING

 TREE LINE



SCALE, FEET
0 10 20 30

		ISSUED FOR:	DATE:	DESIGN:	JOC	<div><div>URS</div><div>URS Corporation 115 Water Street, Suite 3 Hallowell, ME 04347 Tel: 207.623.9188 Fax: 207.622.8085 www.urscorp.com</div></div>	PROJECT NAME:	BIO-ENHANCED NATURAL ATTENUATION SYSTEM O&M		SHEET TITLE:	<div>EXISTING SITE CONDITIONS</div> <div>SHEET 1 OF 1 DRAWING NO.: 4</div>		
		PRELIMINARY		DRAWN:	ASH		PROJECT LOCATION:	PARKER LANDFILL, LYNDON, VERMONT					
		APPROVAL		CHECKED:	JOC		CLIENT:	VERMONT AMERICAN CORPORATION					
REV	DATE	DESCRIPTION	CONSTRUCTION	APPROVED:	MAO		PROJECT NO.:	38-400054	FILE NO.:	WELL LOCATIONS.DWG		SCALE:	AS SHOWN



GENERAL NOTES

- THE CONFIGURATION OF THE WETLAND SHOWN ON THIS DRAWING IS APPROXIMATE. THE WETLAND SHALL BE CONSTRUCTED AS CLOSE AS PRACTICAL TO THE CONFIGURATION SHOWN AND/OR AS DIRECTED BY THE ENGINEER.
- THE ENGINEER WILL PROVIDE MARKS ON ASSISTANCE TO THE CONTRACTOR FOR WETLAND LAYOUT AND GRADING.
- THE WETLAND AREA SHALL BE ROUGH-GRADED WITH AN ELEVATION THAT IS GENERALLY WITHIN 0.5 FEET OF THE INDICATED ELEVATION EXCEPT THE BENCH AREAS, WHICH SHALL BE GRADED AS CLOSE AS PRACTICAL TO THE INDICATED ELEVATION. THE CONTRACTOR SHALL PROVIDE LASER GRADE CONTROL EQUIPMENT.
- EXISTING VEGETATED PORTIONS OF THE AREA TO BE EXCAVATED THAT ARE AT GRADE SHALL BE PRESERVED IF PRACTICAL.
- EXCAVATED EXPOSED WETLAND SOIL SHALL BE STOCKPILED ADJACENT TO THE SITE IN AN AREA DESIGNATED BY THE ENGINEER FOR RE-USE BY THE PROPERTY OWNER. THE STOCKPILE SHALL BE SURROUNDED BY TEMPORARY SEDIMENT CONTROLS, SUCH AS SILT FENCES OR MAY BALES.
- TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH GENERAL NOTES ON SHEET 3 OF THE PERMEABLE REACTIVE BARRIER DESIGN.
- THE CONTRACTOR SHALL EXCAVATE THE WETLAND IN A MANNER THAT MINIMIZES DAMAGE TO THE SURROUNDING UNDISTURBED AREAS AND EXISTING WETLAND.
- THE CONTRACTOR SHALL EXCAVATE NO CLOSER THAN 10 FEET TO ANY TREE, MEASURED FROM THE TRUNK, SHOWN ON THE DRAWING OR INDICATED BY THE ENGINEER.
- ALL TEMPORARY CONSTRUCTION ROADS OUTSIDE OF THE EXCAVATED WETLAND BUT WITHIN THE DELINEATED WETLAND SHALL BE UNDERPAVED AT A GEOTECHNICAL RAY ROAD WITHIN THE DELINEATED WETLAND SHALL BE REMOVED AND THE EXPOSED AREA REVEGETATED IN THE SAME MANNER AS THE EXCAVATED WETLAND.
- MAXIMUM EXCAVATED SLOPE SHALL BE 3:1 HORIZONTAL TO 1 VERTICAL.
- NO EXCAVATION SHALL OCCUR OUTSIDE OF THE 50-FOOT CONSERVATION EASEMENT LIMIT.
- WORK SHALL BE PERFORMED IN GENERAL ACCORDANCE WITH THE GENERAL NOTES AND TECHNICAL SPECIFICATIONS FOR THE PERMEABLE REACTIVE BARRIER, AS APPROPRIATE.

WETLAND CONSTRUCTION NOTES

- CONDUCT A PRE-CONSTRUCTION MEETING WITH CONTRACTOR (INCLUDING EQUIPMENT OPERATOR AND SUPPORT PERSONNEL) AND URS (INCLUDING FIELD ENGINEER AND WETLAND SCIENTIST) TO COORDINATE PROJECT SCHEDULE AND SITE VISITS. REVIEW PLANS AND ANY ADDITIONAL SIMULATED CONSIDERATIONS FROM EPA.
- DELINEATE THE LIMITS OF EXCAVATION PRIOR TO BREAKING GROUND, USING STAKES AND WARNING TAPE OR OTHER APPROVED METHOD.
- WORK SHALL BEGIN AT THE DOWNSTREAM END AND PROCEED UPSTREAM.
- TOPSOIL SHALL BE CAREFULLY REMOVED AND STOCKPILED IN EITHER UPLAND AREAS OR THE AREAS TO BE EXCAVATED FOR FINAL GRADING. STOCKPILING IN AREAS OF THE WETLAND THAT WILL NOT BE EXCAVATED IS NOT ALLOWED.
- INITIAL GRADING SHALL BE 0.5-2.5 FEET BELOW FINAL GRADE, THEN COVERED WITH TOPSOIL, AND LEFT TOGRASS. GRADED ELEVATIONS SHALL BE 7.7' ± 0.5 FEET AND ARE TO BE CHECKED BY THE ENGINEER PRIOR TO PLANTING. MINOR ADJUSTMENTS TO GRADING MAY BE MADE BY THE ENGINEER IN RESPONSE TO THE RESULTED HYDROLOGY AND REFERENCE SITE CONDITIONS.
- NO SEEDING OR MULCHING SHALL BE DONE IN WATER 3' OR DEEPER. IN SUCH CASES, CONSULT WITH THE ENGINEER TO DETERMINE IF SEEDING IS NEEDED OR IF SEEDING SHOULD COMMENCE WHEN THE WATER TABLE DROPS. SHOULD DRAINAGE BE REQUIRED, IT WILL BE DONE IN ACCORDANCE WITH APPROPRIATE BEST MANAGEMENT PRACTICES AND WILL REQUIRE THE APPROVAL OF THE ENGINEER.
- SHRUBS AND TREES SHALL BE PLANTED IN A NATURAL-LIKE DISTRIBUTION AS DIRECTED BY THE ENGINEER. SHRUB SPACING SHALL BE AN AVERAGE OF 8 FEET ON CENTER AND TREES SHALL BE AN AVERAGE OF 10 FEET ON CENTER.
- THE ENGINEER WILL REVIEW THE SITE PERIODICALLY DURING PLANTING.
- THE ENGINEER MAY AUTHORIZE RELOCATION OF UP TO 50% OF THE PLANTINGS WITHIN EACH ZONE IF AS-BUILT SITE CONDITIONS WOULD OTHERWISE THREATEN THE SURVIVAL OF THE PLANTINGS.
- ALL AREAS OF EXPOSED WETLAND SOILS SHALL BE SEEDS WITH NEW ENGLAND EROSION CONTROL PRESTATIONARY MIX FOR DETENTION BASINS AND BENCHES AT A RATE OF 30 LB/AC (FROM NEW ENGLAND WETLAND PLANTS, AMHERST, MA) WITH THE ADDITION OF A NUTRIENT-ENRICHED SEEDING MIXTURE (AS SUPPLIED BY NEW ENGLAND EROSION CONTROL) AT A RATE OF 10 LB/AC (FROM NEW ENGLAND WETLAND PLANTS, AMHERST, MA). AREAS SHALL BE HYDROSEDED WITH AN APPROPRIATE TACKIFIER AND MULCH OR HAND SEEDING AND MULCHING (2" ± 8" MULCH WITH CLEAN STRAW). HAY SHALL NOT BE USED AS A MULCH.
- ALL AREAS SUBJECT TO EROSION (INCLUDING BUT NOT LIMITED TO THE GRADING AT THE STREAM CHANNEL, AND THE SLOPELY HIGHER BANKS OR BENCHES) ARE TO BE REINFORCED WITH COR EROSION CONTROL BLANKETS (L-6000) OR EROSION CONTROL BLANKET OR EQUIVALENT. DO NOT USE SUELFER OR SIMILAR PHOTOGRAPHIC EROSION CONTROL BLANKETS.
- ON 1% SLOPES SHALL BE COVERED WITH DOUBLE NET EROSION CONTROL BLANKET SCISSORS OR EQUIVALENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PLANTING SPECIFICATIONS

- WETLAND PLANTS AND SEED MIXES SHALL BE OBTAINED LOCALLY AND LOCAL GENOTYPES ARE TO BE USED WHENEVER POSSIBLE. NO PLANT SUBSTITUTIONS ARE ALLOWED UNLESS APPROVED BY THE ENGINEER AND EPA. THE ENGINEER IS TO DETERMINE THE PLANT ORDER TO ASSURE PROPER SPECIES AND CULTIVARS ARE OBTAINED. EXAMPLES OF NEW ENGLAND WETLAND PLANT SUPPLIERS INCLUDE PETERSON NURSERIES (BROOKFIELD, ME) AND NEW ENGLAND WETLAND PLANTS (AMHERST, MA).
- PLANTINGS ARE TO BE Laid OUT BY URS WETLAND SCIENTIST. THE US FISH AND WILDLIFE SERVICE STATUS SHALL BE USED TO HELP DETERMINE WHICH SPECIES ARE TO BE PLANTED IN WETTER WETLANDS AND WHICH ARE TO BE PLANTED IN DRIER WETLANDS. THE PLANT RATINGS FROM WETTEST TO DRIEST ARE AS FOLLOWS: ONLY ACHNOGONUM, WITH THE MODIFIERS "1" BEING WETTER AND "2" BEING DRIER. CLUSTERING OF PLANTS OF THE SAME SPECIES IS ENCOURAGED TO SIMULATE NATURAL PATCHY DISTRIBUTIONS.
- PLANTING STOCK

SCIENTIFIC NAME	COMMON NAME	STATUS	NUMBER
A. N. V. T. P. M. S. P.	BUCKLE		
CA. RUDEB.	SPECKLED ALDER	PACH	60
CA. RUDEB.	SILKY BIRCH	PACH	100
AL. TA. T. T. C. S. P.	POSSY VILLOW	PACH	70
AL. TA. T. T. C. S. P.	HIGHER BLUEBERRY	PACH	30
AL. TA. T. T. C. S. P.	ASSORTED WINTERBERRY	PACH	30
CA. RUDEB.	HEADSUCKER	PACH	70
- TREES ARE TO BE AT LEAST 36 INCHES TALL. SHRUBS MUST BE AT LEAST 24 INCHES TALL AND ALL WOODY SPECIES ARE TO BE CONTAINING GROWN OR BARE ROOT STOCK PLANTED INTO CONTAINERS IN THE CURRENT SPRING. ALL SPECIES ARE TO BE NATIVE, NON-ORNAMENTAL, CULTIVARS.
- IF PLANTING STOCK IS DELIVERED AHEAD OF TIME, THE STOCK SHALL BE WATERED AS NEEDED AND PROPERLY CARED FOR ON-SITE PRIOR TO PLANTING.
- THE URS WETLAND SCIENTIST SHALL REVIEW ALL PLANTING STOCK AND PRIOR TO PLANTING TO ASSURE QUALITY AND QUANTITIES. COPIES OF ALL PACKING SLIPS FOR PLANT MATERIALS AND SEED MIXES SHALL BE PROVIDED TO THE ENGINEER PRIOR TO USE.
- PLANT CONTAINERS WILL BE WATERED ALONG STREAM NUMBER AND LOCATION TO BE DETERMINED IN CONSULTATION WITH VIDEO AND USFWS.

LEGEND

EXISTING	PROPOSED
706	INDEX CONTOUR
---	CONTOUR
---	WETLAND LIMITS (FROM HLA)
---	WETLAND LIMITS (FROM HLA)
---	HAND BORING BY URS
---	EXISTING MONITORING WELL
---	APPROX. STREAM CENTERLINE
---	50' CONSERVATION EASEMENT (SETBACK FROM STREAM CENTERLINE)
---	T.O.W
---	TOP OF WATER
---	AREAS REQUIRING COIR MATTING

REVIEW PLAN - NOT FOR CONSTRUCTION

1	08/18/05	REGULATOR REVIEW REVISIONS ADDED
REV	DATE	DESCRIPTION

ISSUED FOR:	DATE:	DESIGN:	LL/DWA	STAMP:
PRELIMINARY	AUG 2005	DRAWN:	CAM	
APPROVAL:		CHECKED:	JCC	
CONSTRUCTION		APPROVED:	JCC	

URS Corporation
477 Congress St. 9th Floor
Portland, ME 04101
Tel: 207.879.7686
Fax: 207.879.7685
www.urscorp.com

PROJECT NAME:	WETLAND MITIGATION
PROJECT LOCATION:	PARKER LANDFILL, LYNDON, VERMONT
CLIENT:	VERMONT AMERICAN CORPORATION
PROJECT NO.:	39459654

DWG. TITLE:	SITE GRADING AND PLANTING PLAN
SCALE:	1" = 30'
DATE:	AUGUST 2005

Sheet 1 of 1
Drawing #:

5

APPENDIX A

Final Inspection Reports

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1

MEMORANDUM

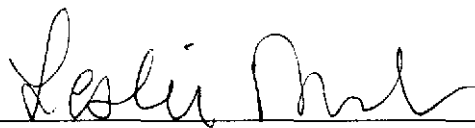
DATE: September 29, 2005

SUBJECT: Parker Landfill Superfund Site, Lyndonville, VT
Final site Inspection

FROM: Leslie McVickar,
Remedial Project Manager

TO: The File

On September 26, EPA conducted it's final inspection at the Parker Landfill Superfund Site. On September 22 the Vermont Department of Environmental Conservation (VTDEC) conducted their final inspection. Both EPA and the VTDEC concur that the Remedial Response has been constructed in accordance with all applicable Remedial Action Work Plans and Remedial Design Reports. Attached is a punch list of outstanding items to be accomplished to achieve final acceptance.



Leslie McVickar, EPA Remedial Project Manager

9-30-05

Date

Parker Landfill Superfund Site
Ground Water Remediation
Punch List Items
September 26, 2005

<i>No.</i>	<i>Area</i>	<i>Item</i>	<i>Date Listed</i>	<i>Date to be Addressed</i>
1.	Sitewide	Remove trailers, portable sanitary facilities	9/26/05	12/31/05
2.	Sitewide	Final Inspection	9/26/05	Completed
3.	PRB	Remove full dumpster (solid waste)	9/26/05	12/31/05
4.	PRB	Repair erosion damage to road and stream crossing (rills, haybales, etc.)	9/26/05	11/30/05
5.	PRB	As-built survey, including setting pins per VTDEC requirements	9/26/05	12/31/05
6.	PRB	Remove empty Clean Harbors dumpster	9/26/05	Completed
7.	PRB	Re-seed bare areas	9/26/05	Completed
8.	BNA	Test extraction pumps	9/26/05	Completed
9.	BNA	Assemble/leak test injection system	9/26/05	Completed
10.	BNA	Wet test injection system	9/26/05	Completed
11.	BNA	State electrical inspection	9/26/05	Completed
12.	BNA	Dispose water from frac tank	9/26/05	11/1/05
13.	BNA	Remove frac tanks	9/26/05	12/1/05
14.	BNA	Hydroseed three bare areas	9/26/05	Completed
15.	BNA	Repair erosion damage	9/26/05	Completed
16.	Wetland	Complete plantings	9/26/05	Completed
17.	Wetland	Re-evaluate inlet design	9/26/05	05/30/06



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

JUL 11 2001

July 5, 2001

Paul Kaminski
Project Coordinator
Parker Landfill Superfund Site
Ethan Allen Drive
P.O. Box 1966
Danbury, CT 06813-1966


Re: Parker Landfill Superfund Site, Actions pursuant to Consent Decree for Remedial Action,
Civil Action Number 2:97-CV-313

Dear Mr. Kaminski:

The EPA, VTDEC, and Performing Settlers site inspection of June 20, 2001 satisfied the consent decree requirement for a pre-certification inspection. The landfill and related system were in good condition. EPA, after reasonable opportunity for review and comment by the VTDEC, is providing a punch list of outstanding items to be accomplished to achieve final acceptance with this letter. The RA/Certification Report is due by July 20th, 2001.

With this letter EPA also formally acknowledges that the November 1999 Notice of Violation with respect to Vermont Water Quality Standards and excessive erosion is not longer in effect. The landfill and adjacent areas have been adequately stabilized. Final resolution of the Notice of Violation includes the acceptance of the created wetlands and the establishment of the conservation easement/buffer along the Brook. Please contact me at (617) 918-1372 if you have any questions.

Sincerely,


Edward M. Hathaway, RPM
ME/VT/CT Superfund Section

cc: Leslie McVickar, EPA RPM
John Schmeltzer, VT DEC
Brian O'Mara, TRC
Jim Campbell, EMI
Fred Taylor, CRA
Rick Lewis, ITGTI
Marcel Guay, Dames and Moore
Santo Longo, Lebouef, Lamb, Green, and MacRae

Toll Free • 1-888-372-7341

Internet Address (URL) • <http://www.epa.gov/region1>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Postconsumer)

Punch List Items to Achieve Final Acceptance

1. Install insect screen for 6 inch diameter HDPE Vent Pipe for Landfill Gas Condensate Tank. (Reference Drawing C-314, Detail F)
2. Install bollards or suitable protection devices to protect above ground components of underground storage tank for Landfill Gas Condensate System.(Reference Drawing C-314, Detail F)
3. Install protective casing or enclosure for above grade portions of instrument boxes for the underground storage tank for Landfill Gas Condensate System.(Reference Drawing C-314, Detail F)
4. Locks shall be installed on gas probes that are not flush mounted. (Reference Drawing C-306)
5. Install insulation on exposed piping within the gas well enclosures. (Drawing C-312).
6. Place more riprap over the outlet for Culvert No. 3 or add top soil so that grass can grow under erosion control blanket over outlet.
7. Place more riprap at inlet structure for Culvert No. 3
8. Stabilize the banks of the stream adjacent to the construction access road to repair recent erosion and to minimize future erosion.
9. Repair the protective casings of groundwater wells B-111 and B-112 to prevent accumulation of water within the casing.
10. Establish complete vegetative cover over IWS-3 and adjacent areas, including drainage areas.
11. Install 7 landfill gas monitoring wells to serve as compliance points for the shallow and deep landfill gas.
12. Install data logging devices within two of the landfill gas monitoring well cluster to provide long-term assessment of shallow and intermediate gas.
13. Install alarm devices at two locations to notify Performing Settlers of methane within the shallow zone.



State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks, and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICES FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
WASTE MANAGEMENT DIVISION

103 South Main Street
West Building
Waterbury, VT 05671-0404

FAX 802-241-3296
TEL 802-241-3888

September 30, 2005

Leslie McVickar
Environmental Protection Agency
New England, Region 1
1 Congress Street, Suite 1100
Boston MA 02114-2023

Re: Superfund Preliminary Close out Report
Parker Landfill, Lyndon, Vermont (Site #77-0013)

Dear Leslie:

The Vermont Department of Environmental (VT DEC) has reviewed the Preliminary Close Out Report (PCOR) prepared by the United States Environmental Protection Agency (EPA) and participated in inspections to evaluate the Remedial Action at the Parker Landfill Superfund Site in Lyndon, Vermont. The VT DEC concurs with the Environmental Protection Agency (EPA) that the construction activities at the Parker Landfill Superfund site are substantially completed. The VT DEC also concurs with EPA's punch list of outstanding items to be accomplished before final acceptance is granted. Punch list items, which are attached to the Superfund site Preliminary Close Out Report (PCOR) dated September 2005, include stabilizing the former unnamed stream crossing that was used as access to the permeable reactive barrier (PRB) area and ensuring that the newly created wetland area becomes established. As stated in the PCOR, I do not anticipate additional remedial construction activities action at this site unless the existing remedial actions are not meeting the performance objectives of the Record of Decision (ROD).

Sincerely,

John Schmeltzer, Project Manager
Sites Management Section

cc: Ed Hathaway, EPA
Jason Clere, URS Corporation, Portland, Maine
Dale Weiss, TRC Corporation, Lowell, MA
Tom Cleland, Fairbank Scales, St Johnsbury